

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended)      A method comprising:  
  
        defining a predetermined event, the occurrence of the predetermined event to cause a spin-down of a hard disk;  
  
        detecting the occurrence of the predetermined event;  
  
        in response to the predetermined event,  
  
                spinning down the hard disk, and  
  
                storing historical performance data of the hard disk on a non-volatile memory unit of a system, the **historical performance** data including data identifying the predetermined event as a cause of a spin-down of the hard disk and a period of time thereafter before the hard disk was spun up, the **historical performance** data being available on the memory unit after the system has been rebooted.
2. (Original)    The method of claim 1, wherein the non-volatile memory unit is a cache for the hard disk.
3. (Original)    The method of claim 2, wherein the non-volatile memory unit includes a form factor of a Mini Peripheral Component Interconnect Express card.

4. (Original) The method of claim 1, wherein the non-volatile memory unit includes a Peripheral Component Interconnect Express interface.

5. (Original) The method of claim 1, wherein the non-volatile memory unit consists of a thin film electronics memory.

6. (Previously Presented) The method of claim 1, further including using the historical performance data to implement a power management policy of the hard disk.

7. (Canceled).

8. (Currently Amended) A machine readable medium having stored thereon a set of instructions which when executed cause a system to perform a method comprising of:

defining a predetermined event, the occurrence of the predetermined event to cause a spin-down of a hard disk;

detecting the occurrence of the predetermined event;

in response to the predetermined event,

spinning down the hard disk, and

storing historical performance data of the hard disk on a non-volatile memory unit of a system, the **historical performance** data including data identifying the predetermined event as a cause of a spin-down of the hard disk and

a period of time thereafter before the hard disk was spun up, the **historical performance** data being available on the memory unit after the system has been rebooted.

9. (Original) The machine readable medium of claim 8, wherein the non-volatile memory unit is a cache for the hard disk.

10. (Original) The machine readable medium of claim 9, wherein the non-volatile memory unit includes a form factor of a Mini Peripheral Component Interconnect Express card.

11. (Original) The machine readable medium of claim 8, wherein the non-volatile memory unit includes a Peripheral Component Interconnect Express interface.

12. (Original) The machine readable medium of claim 8, wherein the non-volatile memory unit consists of a thin film electronics memory.

13. (Canceled).

14. (Currently Amended) A system comprising of:

a processor;

a non-volatile cache coupled to the processor; and

a machine readable medium having stored thereon a set of instructions which when executed cause the system to perform a method comprising of:

defining a predetermined event, the occurrence of the predetermined event to cause a spin-down of a hard disk;

detecting the occurrence of the predetermined event;

in response to the predetermined event,

spinning down the hard disk, and

storing historical performance data of the hard disk on the non-volatile cache of a system, the **historical performance** data including data identifying the predetermined event as a cause of a spin-down of the hard disk and a period of time thereafter before the hard disk was spun up, the **historical performance** data being available on the non-volatile cache after the system has been rebooted.

15. (Previously Presented) The system of claim 14, wherein the non-volatile cache is a cache for the hard disk.

16. (Original) The system of claim 14, wherein the non-volatile cache includes a form factor of a Mini Peripheral Component Interconnect Express card.

17. (Previously Presented) The system of claim 14, wherein the non-volatile cache includes a Peripheral Component Interconnect Express interface.

18. (Previously Presented) The system of claim 14, wherein the non-volatile cache consists of a thin film electronics memory.

19. (Canceled).